

Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A ~~vertical~~ form-fill seal machine for the in-line manufacturing of food packages having mated fastener tracks with slider closures, comprising:
 - a supply of web material extending in a machine direction package portions extending in the machine direction and having;
 - a supply of mated fastener tracks having a free edge;
 - a collar member receiving said web material;
 - a web drive transporting said web material over said collar in the machine direction, folding said web into overlying side-by-side portions, one against the other to form a continuous succession of package portions extending in the machine direction and having pairs of overlying package walls which include overlying free edges;
 - a pair of fastener seal bars extending in the machine direction sealing a portion of said fastener tracks to the package walls extending in the machine direction;
 - a pair of peel seal bars extending in the machine direction forming a peel seal between said package walls;
 - a supply of slider members mateable with said mated fastener tracks for movement along said mated fastener track in opposite directions to open and close said mated fastener tracks;
 - a fastener track activation member forming an initial opening in said mated fastener tracks to receive a portion of said slider member;
 - a slider installation member inserting said slider members onto said mated fastener tracks by pushing said slider members onto said mated fastener tracks adjacent the opening formed by said activation member;
 - said fastener track activation member comprising a funnel which is passed over the free edge of said mated fastener tracks to apply a compressive force at a point on said mated fastener tracks spaced from said mated fastener tracks free edge, to pivot said mated fastener tracks one against the other to form an opening at the free edge of said mated fastener tracks; and

a pair of spaced-apart side seal bars extending at an angle to said machine direction, sealing portions of said package walls together to form respective side seals of the food package.

2. (Original) The machine of claim 1 wherein one of said side seal bars includes a tapered portion extending in the machine direction and located adjacent said fastener tracks.

3. (Currently Amended) The machine of claim 2 further comprising a ~~wherein the~~ heat sink plate which is supported from said collar.

4. (Original) The machine of claim 3 wherein said heat sink plate has the form of a metal finger and is metallurgically joined to said collar.

5-8 Cancelled

9. (Currently Amended) The machine of claim 1 wherein the mated fastener tracks include respective mounting flanges overlying one another and extending along the mated fastener tracks.

10. (Original) The machine of claim 9 wherein the mounting flanges extend from the fastener tracks different amounts, with one mounting flange having a greater height than the other, with the food package viewed in an upright position.

11. (Original) The machine of claim 10 wherein the fastener track seal bars seal free edge portions of said package walls to said respective mounting flanges.

12. (Original) The machine of claim 11 wherein said peel seal bars join one face of said mounting flange of greater height to a face of one of said package walls.

13. (Original) The machine of claim 1 wherein said web drive transports said web in a series of predetermined stepped amounts.

14. (Original) The machine of claim 13 further comprising a position sensor sensing the web position, located immediately adjacent said collar; the position sensor in communication with said web drive to control transport of said web material.

15. (Original) The machine of claim 1 wherein said collar forms a dead fold in said web extending in the machine direction with an opening between said package walls opposite said dead fold formed by said free edges.

16. (Original) The machine of claim 1 further comprising a curved accumulation track for receiving a plurality of said sliders arranged side-by-side in a serial succession.

17. (Original) The machine of claim 1 further comprising a registration device selectively applying tension to said mated fastener tracks to alter registration of said mated fastener tracks with respect to said web material.

18. (Original) The machine of claim 17 wherein said registration device comprises an idler roller engaging said mated fastener tracks and mounted for movement toward and away from a neutral position so as to alter tension applied to said mated fastener tracks.

19. (Original) The machine of claim 1 further comprising a stop forming station through which said mated fastener tracks pass, said stop forming station including cooperating horn and anvil members opposing the other on opposite sides of said mated fastener tracks, at least one of said horn and anvil members movable toward the other to crush a portion of said mated fastener tracks to form back-to-back slider stop members, and at least one of said horn and said anvil movable away from one another to release said mated fastener tracks at the conclusion of a crushing operation.

20. (Original) The machine of claim 19 wherein said web drive moves said mated fastener tracks in a series of discontinuous steps, so as to cooperate with said stop forming station to form a series of spaced-apart back-to-back slider stop members along said mated fastener tracks.

21. (Original) The machine of claim 1 further comprising a web position sensor mounted on said collar and connected to said web drive means to control operation of said web drive means.

22. (Original) The machine of claim 1 wherein said the fastener track seal bars and said peel seal bars are located beside one another.

23. (Original) The machine of claim 22 wherein said fastener track seal bars and said peel seal bars are generally coextensive with one another.

24. (Original) The machine of claim 1 further comprising a second pair of spaced-apart side seal bars located beside said one pair of spaced-apart side seal bars and cooperating therewith to form two adjacent, consecutive side seal's in said web material, associated with adjacent consecutive food package portions.

25. (Original) The machine of claim 1 wherein said mated fastener tracks have an A-shaped cross-section.

26. (Currently Amended) The machine of claim 1 further comprising a heat sink plate disposed between said package walls, and between said pair of fastener seal bars.

27. (Currently Amended) ~~The combination of a shredded cheese product and a vertical A~~ form-fill seal machine for the in-line manufacturing of food packages having mated fastener tracks with slider closures, comprising:

a supply of web material extending in a machine direction package portions extending in the machine direction and having;

a supply of mated fastener tracks having a generally A-shaped cross section with a pair of opposed free edges;

a collar member receiving said web material;

a web drive transporting said web material over said collar in the machine direction, folding said web into overlying side-by-side portions, one against the other to form a continuous succession of package portions extending in the machine direction and having pairs of overlying package walls which include overlying free edges;

a pair of fastener seal bars extending in the machine direction sealing a portion of said fastener tracks to the package walls extending in the machine direction;

a pair of peel seal bars extending in the machine direction forming a peel seal between said package walls;

a supply of slider members mateable with said mated fastener tracks for movement along said mated fastener track in opposite directions to open and close said mated fastener tracks;

a slider installation member inserting said slider members onto said mated fastener tracks;

a fastener track activation member comprising a funnel which is passed over the free edges of said mated fastener tracks to apply a compressive force at a point on said mated fastener tracks spaced from said mated fastener tracks free edge, to pivot said mated fastener tracks one against the other to form an opening between at least a portion of said mated fastener tracks; and

a pair of spaced-apart side seal bars extending at an angle to said machine direction, sealing portions of said package walls together to form respective side seals of the food package.

28. (Original) The machine of claim 27 wherein said web drive transports said web in a series of predetermined stepped amounts.

29. (Original) The machine of claim 27 further comprising a position sensor sensing the web position, located immediately adjacent said collar, the position sensor in communication with said web drive to control transport of said web material.

30-52 Cancelled